California Department of Public Health
Radiation Monitoring Report 1st Quarter 2012

Air: In response to the Japanese nuclear incident, the California Department of Public Health (CDPH) increased its routine air monitoring frequency for six weeks beginning in mid-March 2011. Prior to the resumption of routine weekly monitoring at the end of the April, only trace amounts of radiation attributed to the Japanese nuclear emergency had been detected.

CDPH has air sampling stations in nine locations in California. From Jan 1, 2012 to March 31, 2012, CDPH collected air samples from Eureka, Humboldt Bay, Richmond, Livermore, San Luis Obispo, Avila Beach, Los Angeles, San Clemente, and San Diego. Samples from these stations were analyzed for radioactive elements including beryllium-7, cerium-141, cerium-144, cesium-134, cesium-137, potassium-40, niobium-95, ruthenium-103, ruthenium-106, and zirconium-95. The 1st-quarter composite airborne-particulate samples, comprised of multiple samples taken at each location over the reporting period, were analyzed by gamma spectroscopy. The results revealed only naturally-occurring radionuclides.

Milk: No radionuclides were detected in milk sampled during the first quarter of 2012.

Sample Station	Date Collected	Results (picoCuries per Liter)	Estimated Radiation Dose per Month (millirem)
CalPoly Dairy Farm	1/9/2012	No Detection	N/A
	2/6/2012	No Detection	N/A
	3/5/2012	No Detection	N/A
Rumiano Cheese	2/2/2012	No Detection	N/A
Humboldt Creamery	2/7/2012	No Detection	N/A

N/A = not applicable

Notes: CDPH has milk sampling stations in 3 locations in California. Samples from these stations are analyzed for radioactive elements including barium-140, cerium-141, cerium-144, cesium-134, cesium-137, iodine-131, iodine-132, ruthenium-103, ruthenium-106, tellurium-132 and zirconium-95. No radionuclides were detected in milk sampled during the first quarter of 2012.

We are exposed to radiation every day, both from natural sources including foods, minerals in the ground and radiation from the sun, and from man-made sources such as medical x-rays. According to the National Council on Radiation Protection and Measurements (NCRP) Report No. 160, the average annual radiation dose per person in the U.S. is 620 millirem, which includes exposure from natural background sources and from medical diagnostic and therapeutic procedures.